CONTENTS TO VOLUME 55

Computational physics	*Issue*	*Page*
Haydock, R. Recursive tridiagonalization of infinite dimensional Hamiltonians	1	1
Pantelic, D.V. and Z.D. Janevski A new kind of splines and their use for fast ray-tracing in reflective cavities	1	5
Raine, A.R.C., D. Fincham and W. Smith Systolic loop methods for molecular dynamics simulation using multiple transputers	1	13
Moncrieff, D., D.J. Baker and S. Wilson Diagrammatic many-body perturbation expansion for atoms and molecules: VI	1	31
Kamgnia, E. and A. Sameh A fast elliptic solver for simply connected domains	1	43
Carter, S., P. Rosmus, N.C. Handy, S. Miller, J. Tennyson and B.T. Sutcliffe Benchmark calculations of first principles rotational and ro-vibrational line strenghts	1	71
Parga, N. Neural networks as models of associative memories	1	77
Pichon, B. Numerical calculation of the generalized Fermi–Dirac integrals	2	127
Friedman, R.S. and M.J. Jamieson Model potentials for multichannel eigenvalue problems	2	137
Shoucri, M., I. Shkarofsky, V. Fuchs, K. Kupfer, A. Bers and S. Luckhardt A quasilinear Fokker–Planck code for the numerical solution of the lower-hybrid current-drive problem in the presence of electron cyclotron heating	3	253
Grest, G.S., B. Dünweg and K. Kremer Vectorized link cell FORTRAN code for molecular dynamics simulaton for a large number of particles	3	269
Amar, J.G. and F. Sullivan Monte Carlo simulaton of domain growth in the kinetic Ising model on the connection machine	3	287
Bhattacharya, R., D. Roy and S. Bhowmick On the regularity of the Levin *u*-transform	3	297
Lan, V.K., M. Le Dourneuf, N.F. Allard, H.E. Saraph and W. Eissner On the comparisons of close-coupling calculatons using the UCL and opacity codes	3	303
Mohanakrishnan, P. Use of albedo for neutron reflector regions in reactor core 3D simulations	3	311

Computer programs in physics	*Issue*	*Page*
Catchen, G.L. Perturbation functions: PAC probe nuclei, $I = 2, 5/2$, and 3	1	85
Reid, J.S. and G.J. Milne Quasi-elastic X-ray scattering divergence analysis calculation	1	91
Persson, S. Measurement and three dimensional reconstruction of particle tracks in emulsion chambers	1	103
Mustafa, M.M., M.W. Kermode and E.S. Zahran Solution of the two-nucleons Schrödinger equation with nonlocal tensor potential in the $^3S_1-^3D_1$ state	1	109
Carbó, R. and B. Calabuig MOLSIMIL-88: molecular similarity calculations using a CNDO-like approximation	1	117
Kaneko, T. and S. Kawabata A preprocessor for FORTRAN source code produced by REDUCE	2	141
Tennyson, J. and S. Miller A program suite for the calculation of ro-vibrational spectra of triatomic molecules	2	149
Das, P. Computer programs for the Boltzmann collision matrix elements	2	177
Park, S.C. and J.P. Draayer Balanced binary tree code for scientific applications	2	189
Surguladze, L.R. and F.V. Tkachov LOOPS: procedures for mulitloop calculations in quantum field theory for the REDUCE system	2	205
Etchegoyen, A. and M.C. Etchegoyen Microscopic inelastic form factors for heavy-ion reactions	2	217
Etchegoyen, A., M.C. Etchegoyen and E.G. Vergini Evaluation of Hamiltonian two-body matrix elements	2	227
Ganssauge, E., B. Dressel, S. Hackel, H. Kallies, E. Koch, Ch. Müller, J.T. Rhee, W. Schulz and K. Ständecke A track reconstruction program (TRP) for evaluation of nucleus–nucleus collisions in nuclear track emulsion chambers	2	233
Creutz, M., P. Mitra and K.J.M. Moriarty Erratum notice. A fast algorithm for investigations on the three-dimensional Ising model (ACCP – CPC 33 (1984) 361)	2	251
Grotendorst, J. MAPLE programs for converting series expansions to rational functions using the Levin transformation. Automatic generation of FORTRAN functions for numerical applications	3	325
Tobimatsu, K. and Y. Shimizu Radiative Bhabha scattering in special configurations with missing final e^+ and/or e^-	3	337

Computer programs in physics (continued)	*Issue*	*Page*
Chen, Y.-M., A.E. Koniges and D.V. Anderson ILUBCG2-11: Solution of 11-banded nonsymmetric linear equation systems by a preconditioned biconjugate gradient routine	3	359
Talwar, I. and L.E. Wright The radiation tail accompanying elastic electron scattering from the atomic nucleus	3	367
Gorishny, S.G., S.A. Larin, L.R. Surguladze and F.V. Tkachov MINCER: program for multiloop calculations in quantum field theory for the SCHOONSCHIP system	3	381
Glasser, A.H. and K. Smith POS – a 1D time-dependent H^+ ion source code	3	409
Dyall, K.G., I.P. Grant, C.T. Johnson, F.A. Parpia and E.P. Plummer GRASP: a general-purpose relativistic atomic structure program	3	425
Janse Van Rensburg, D.J. and D.A. McNamara An interactive computer-graphics-based processor for boundary element modelling of electromagnetic scattering by thin conducting wires	3	457
Davie, K. and R. Wallace Orthogonal generalized Jacobi cooridinates for N-body systems	3	463
Meyer, J., W.-D. Sepp, B. Fricke and A. Rosén Erratum notice. Computation of relativistic symmetry orbitals for finite double point groups (ABHW – CPC 54 (1989) 55)	3	469